Meeting Summary
Panther Recovery Team Meeting
Coronado Springs Resort, Orlando, FL
July 25-26, 2001

Panther recovery team members present:

Skip Bergmann, U.S. Army Corps of Engineers
Gary Boyd for Jimmy Bullock, International Paper Company
Dana Bryan, Florida Department of Environmental Protection
Nikki Castleberry, Quality Deer Management Association
Joe Clark, U.S. Geological Survey, Biological Resources Division
Ron Clark for John Donahue, National Park Service
Donald Cuozzo, National Home Builders Association
Pete David, South Florida Water Management District
David Dorman, U.S. Forest Service
Dennis Hardin, Florida Division of Forestry
Tom Jones, Barron Collier Partnership
John Kasbohm, U.S. Fish and Wildlife Service
Robert Lacy, Chicago Zoological Society
Dwight LeBlanc, USDA APHIS Wildlife Services
Laurie Macdonald, Defenders of Wildlife
Dave Maehr, University of Kentucky
Roy McBride Livestock Protection Company
Brian Millsap, Florida Fish and Wildlife Conservation Commission
Stephen O'Brien, National Cancer Institute
Jeff Norment, Natural Resources Conservation Service
Jim Ozier, Georgia Wildlife Resources Division
Richard Rummel, Mississippi Department of Wildlife, Fisheries, and Parks
Steve Shively, Louisiana Department of Wildlife and Fisheries
Andrew Schock, National Wildlife Federation
David Thompson, White Oak Conservation Center
Steve Williams, Florida Panther Society
Jora Young, The Nature Conservancy

Fish and Wildlife Service participants:

Gloria Bell, Southeast Regional Office
Dave Hankla, Jacksonville Field Office
Dawn Jennings, Vero Beach Field Office
Jim Krakowski, Florida Panther NWR
Linda Walker, Jacksonville Field Office

Other participants:

Sonny Bass, Everglades National Park
Monika Dey, US Army Corps of Engineers
Karen Hill, Florida Panther Society
Deborah Jansen, Big Cypress National Preserve
Randy Kautz, Florida Fish and Wildlife Conservation Commission
Darrell Land, Florida Fish and Wildlife Conservation Commission
Kris Thoemke, National Wildlife Federation

Panther recovery team members not present:

Bob McCollum, Alabama Division of Game and Fish
Buddy Baker, South Carolina Department of Natural Resources
Frank Mazzotti, University of Florida
Mel Sunquist, University of Florida/Florida Panther Technical Advisory Council

Others invited but not attending:

American Farm Bureau Federation
Arkansas Game and Fish Commission
Florida Farm Bureau Federation
Miccosukee Tribe of Indians of Florida
Seminole Tribe of Florida

The goals of this meeting were:

1. To develop among Florida Panther Recovery Team (FPRT) members an understanding of the function and responsibilities of a Fish and Wildlife Service (Service) recovery team and its members, and the purpose and requirements of a recovery plan.

2. To allow all FPRT members to become familiar with the biological status of the Florida panther and previous panther recovery efforts.

3. To initiate a process which will lead FPRT members to a consensus regarding the availability and interpretation of existing panther data.

4. To conduct a threat analysis for the Florida panther to serve as the basis of a new recovery goal, criteria, and step-down actions that will result in reclassification and then delisting of the species.

5. To determine what tasks have been accomplished in previous recovery plans.

6. To identify the most appropriate organization of the FPRT and the process to develop a new recovery plan.

7. To define the recovery goal for the Florida panther.

The meeting began at 8:00am and the following items were discussed:

Recovery Team Overview:

John Kasbohm provided background regarding the purpose, roles, and responsibilities of a recovery team. Items discussed were:

1. Recovery teams are not required but are an option to develop many recovery plans.

2. Recovery teams serve in an advisory capacity to the Service under the authorization of the Regional Director to assist in developing/revising the recovery plan.

3. Service policy requires a diverse representation on recovery teams.

4. The team leader serves as a clearing house for information, is a conduit for communication to the Service, is responsible for organizing meetings and compiling minutes, and coordinates writing of the recovery plan.

5. The team and team members should not represent themselves as speaking for the Service or other agencies, distribute draft plans, act through the news media or other parties to influence agency decisions, or interject itself in issues or actions.

6. The team can and should bring other consultants, experts or relevant parties to meetings as needed.

Gary Boyd, International Paper gave a presentation about the Black Bear Conservation Committee (BBCC) and how stakeholder involvement has been instrumental in the recovery program for the Louisiana black bear. The basic premise of the BBCC is that partnerships are more effective than controversial confrontations. Members focus on the goal, to restore the bear, by leaving their organizational bias at the door, providing an opportunity for all stakeholders to participate, and showing mutual respect for one another. Success of the BBCC has been due to starting at the grass roots level, gaining political support, and providing opportunities to develop relationships among stakeholders that ordinarily would not get to know one another. Gary stressed the following points for the panther recovery team: set clear objectives, find a balance, take acceptable risks, think out of the box, and cooperation is a better path than conflict. A key element of success is to use a collaborative approach to remove disincentives and create incentives for landowners that will foster species recovery.

Recovery Plan Overview:

John Kasbohm provided background regarding the process to revise, and the requirements of, a recovery plan. The goal for a draft revised panther recovery plan is July 2002. Items discussed were:

1. Recovery plans are categorically excluded from NEPA but NEPA applies to the implementation of tasks.

2. However, public involvement is required for recovery plans. Once a draft plan is developed, it is made available for public review via formal Federal Register notice. Comments are then summarized, incorporated into a final plan and/or the Service explains why they were not.

3. As specified in the Endangered Species Act, recovery plans must contain:

    a. Descriptions of site-specific management actions as may be necessary to achieve the plan's goal and to achieve intermediate steps toward that goal
    b. Objective, measurable criteria which when met, would result in a determination that the species be removed from the list of endangered and threatened species
    c. Estimates of the time required and the cost to carry out those measures needed to achieve the plan's goal and to achieve intermediate steps toward that goal.

4. The general recovery goal for a recovery plan is first reclassification of an endangered species to threatened and then the delisting of the species. The team needs to determine what this goal means specifically for the panther and then develop actions that will remove the need for listing by removing the threats to the species. Threats should be addressed under the five listing factors identified in the ESA. These are:

    Factor A The present or threatened destruction, modification, or curtailment of the Florida panther's habitat or range
    Factor B: Overutilization for commercial, recreational, scientific, or educational purposes
    Factor C: Disease or predation
    Factor D: The inadequacy of existing regulatory mechanisms
    Factor E: Other natural or manmade factors affecting the Florida panther's continued existence

    Specific, measurable criteria must be developed that will allow an objective determination of when the threats have been removed, and that in turn, will allow reclassification and then delisting. The previous three versions of the panther recovery plan did not meet these requirements, nor did a draft third revision produced by Dennis Jordan in 1998. For this reason, the Service has decided to bring this recovery team together to start over on a new revision that will address these deficiencies and meet these requirements.

5. A draft template for the third panther recovery plan was discussed. The Introduction contains a biological summary for the species. For the panther, the existing species account for the panther in the South Florid Multi-species Recovery Plan will be good place to start; however, a description of existing threats arranged by the listing factors A-F will need to be developed. The Recovery section contains the recovery goal and the specific criteria and actions under each listing factor. The actions should be as specific as possible to avoid a "plan to make other plans." The Implementation Schedule contains a prioritization (priority 1, 2 and 3) of the recovery actions, identifies who will conduct them, and provides estimates of the cost to carry them out. Priorities are defined as follows:

   Priority 1: An action that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.
   Priority 2: An action that must be taken to prevent a significant decline in species population/habitat quality, or some other significant negative impact short of extinction.
   Priority 3: All other actions necessary to provide for full recovery of the species.

6. The definitions of threatened and endangered were reviewed and are the basis for the plan's specific recovery goal, criteria and actions. An endangered species is any species which is in danger of extinction throughout all or a significant portion of its range. A threatened species is any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

7. The team also discussed the need for public involvement in the development of the recovery plan revision. Concerns were raised that public involvement has been insufficient in the past and that private landowners need to be included from the beginning in the development of the plan. Suggestions were made to advertize recovery team meetings and make them open to the public, use a formal NEPA process during plan development, and/or have public meetings/open houses in association with recovery team meetings. ***Action Item:*** ***The Service will develop a means for public involvement in the revision process and present it to the team.***

Status of the Panther:

Darrell Land (FWC) gave a presentation regarding the status of the panther and an overview of the history of recovery efforts. A copy of the power point presentation is available on request.

The need for a summary and review of existing panther data, data analyses and literature was then discussed. Significant questions exist regarding panther data, both what data exists and how it has been analyzed and interpreted. In addition, the Service has been criticized for not adequately using the 20 years of existing data in recovery planning. The primary goal of a data review is to allow the team to understand and agree on the current state of knowledge regarding panthers and ultimately serve as the basis for the revised plan. The review would put to rest any controversies that may now existing

regarding the appropriateness of previously conducted analyses. The team agreed that although those conducting the research must be involved, the best means to achieve an unbiased review is to commission an independent scientific review team to 1) identify strengths, weaknesses, gaps and incorrect or incomplete analyses/interpretation of existing panther data and 2) reanalyze or conduct new analyses where appropriate to address critical data needs. The development of an annotated bibliography also would be beneficial. Possible organizations that could be asked to conduct the review included: the Wildlife Society, the Society for Conservation Biology, the National Academy of Science, and the southeast adaptive management group in Gainesville. The following were identified as possible questions/data/areas to be analyzed/reviewed:

- credibility of the existing data and analyses
- differences in analyses between old and current researchers
- strengths and weaknesses of data sets
- habitat maps (GIS) for accuracy
- current population size and density
- kitten mortality rate (0-6 months)
- annual adult mortality
- land use/land cover
- capture effort
- survey work for sign of cats
- life history of all collared females
- habitat suitability of potential reintroduction areas
- evaluation of PVA models - strengths, weaknesses and data used
- habitat use
- response to disturbance
- prey base data
- dispersal data
- data collection methods and storage
- influence/effects of genetic restoration (Texas cats)
- carrying capacity
- home range size and influences
- contaminants

<u>Action Item:</u> Joe Clark, Deb Jansen, John Kasbohm, and Brian Millsap agreed to develop and give to the team a scope of work to describe how the review could be conducted.

Listing/Recovery Factor Threat Analysis:

Under the requirements of the Endangered Species Act, all listing actions must include a determination as to whether a species meets the definition of threatened or endangered following an analyses of threats under the five listing factors A-E. If sufficient threats exist under one or more of these factors then the species is listed. This analysis then serves as the basis for a species' recovery plan that

identifies how the identified threats will be removed under each factor. Because the panther was listed in 1967 under the provisions of the Endangered Species Preservation Act of 1966, prior to the Endangered Species Act of 1973, no threat analyses has been formally conducted for the species. Consequently, a first step in developing a new panther recovery plan should be an analysis of threats under factors A-E as identified in the ESA.

The team identified the following list of threats for the panther for each listing/recovery factor. The identified threats will need to be prioritized to determine those most important in developing recovery actions.

Factor A: The Present or Threatened Destruction, Modification, or Curtailment of the Florida Panther's Habitat or Range:

- human development - sprawl and where development is occurring
- identify important habitats
- conversion of "natural" habitats to other land uses - urbanization, agriculture, mining
- cumulative impacts
- habitat fragmentation
- road/highway development
- limited range and demographic/genetic consequences
- invasive species
- wetland drainage (ditching) and water diversions
- land management - public and private: prey, prescribed fire, exotics
- elements of everglades restoration
- global climate change and sea level rise
- only one (population) area currently occupied
- loss of connectivity to other suitable habitat
- potential loss of habitat and conflicts from extractive uses of habitat, e.g., oil exploration

Factor B: Overutilization for Commercial, Recreational, Scientific, or Educational Purposes:

(The recovery plan should note that this was a significant threat in the past.)

- over utilization for study - capturing and monitoring?

Factor C: Disease or Predation:

- causes for unexplained mortalities
- transmission of diseases from domestic cats or other species
- raccoons and rabies
- effects of reduced genetic heterozygosity on disease susceptibility
- pseudorabies

Factor D: The Inadequacy of Existing Regulatory Mechanisms:

- State has limited jurisdiction over habitat
- lack of regulatory protection of upland habitats
- no state jurisdiction on Indian reservations
- lack of coordination among agencies
- lack of consistent enforcement
- inadequate implementation of growth management laws
- recovery and take - inconsistency of state regulations on puma protection in SE
- permitting issues and everglades restoration
- conflicting mandates on public lands - what gets priority for management
- conflicting laws e.g., taxation - changes of tax value based on land use
- local zoning on land use
- potential conflict in the terms of existing conservation/agricultural easements

Factor E: Other Natural or Manmade Factors Affecting the Florida Panther's Continued Existence:

- contaminants - e.g, mercury
- road mortality
- impact of disease on prey
- public perception (fear) and knowledge of panthers
- media sensationalism
- genetics
- small population size and its effects
- illegal kill and poaching
- escape of captive cougars
- natural catastrophes
- competition with other animal species - coyotes
- hog effects on habitat and hog removal
- recreational uses - e.g. deer hunting, orvs
- potential conflicts with other listed species management - e.g., RCW and prescribed fire
- limited prey carrying capacity
- intraspecific competition
- conflicts generated by feeding of deer and other wildlife
- conflicts with exotic animal farming - panthers taking ungulates, disease transmission
- edge effects - light, noise

South Florida Multi-species Recovery Plan (MSRP) and the Multi-species Ecosystem Implementation Team (MERIT):

Dawn Jennings provided an overview of the MSRP and MERIT. A part of MERIT is a panther subteam. The subteam has been charged with developing a panther conservation strategy for south

Florida. The strategy will consist of a habitat model for panthers in south Florida, a population viability analysis based on identified habitat, and conservation recommendations. Randy Kautz gave a presentation regarding the progress of the subteam on the conservation strategy. A copy of the power point presentation is available on request.

Status of Previous Panther Recovery Plans:

The team reviewed the actions listed in the step-down outlines in the *Second Revision Florida Panther Recovery Plan* (1995) and the panther species account of the *South Florida Multi-species Recovery Plan* and identified whether they had been completed, are ongoing or not completed.

Second Revision Florida Panther Recovery Plan:

1111. Ongoing, needs updating
1112-1114. Ongoing
1211. Completed but needed in other areas
1212. Completed but needed in other areas
1213. Completed
1214. Completed
1215. Ongoing
122 . Ongoing, but need to identify new threats
123. Partially completed by MERIT subteam; more work needed on hydrology and human population impacts.
1241. Ongoing, genetic management plan completed but, long-term monitoring ongoing
1242. Completed, but needs to be reevaluated as focus has changed to genetic management
125. Several completed, more being developed
126. Some plans completed but not reviewed or compared; task needs revision; existing federal plans need to focus on panthers; FL Panther NWR has a comprehensive plan
127. Completed and in effect
1311. Data collected but guidance not completed
1312. Ongoing
1313. Studies completed, guidance needed.
1314. Studies completed, guidance needed
1315. Completed, guidance needed
1316. Completed
1317. Not completed
1318. Not completed
132. Partially completed.
133. Ongoing
14. Completed in Florida; needs further expansion in southeast
151-155. Ongoing
16. Ongoing

17. Completed and no longer applicable; needs revision; FPIC dissolved in favor of working group
18. Ongoing
191. Ongoing
A. Not completed; needs revision.
B1. Completed
B2. Ongoing
B3. Significant portion completed; some ongoing
B4. Completed
B5. Ongoing; additional acquisitions need emphasis
B6. Completed
21. Completed through FPIC
211-215. Ongoing
216. Not completed.
217. Not completed.
221. Not completed.
311. Ongoing; progress made but needs updating
312. Ongoing
313. Ongoing; progress made but needs expansion to remainder of range
314. Not completed but needs revision
315. Ongoing
3211. Completed, but needs revision
322. Completed, but needs revision
323. Completed, but needs revision
324. Completed, but needs evaluation
331-334. Completed
34. Not completed

Multi-species Recovery Plan Recovery Plan - Panther Species Account

S1.1-2. Ongoing
S2.1.1. Partially completed
S2.1.2. Completed
S2.2. Ongoing
S2.3. Initial plan completed, but ongoing
S2.4. Ongoing
S2.4.1.1. Ongoing; almost complete
S2.4.1.2. Not completed
S2.4.1.3. Ongoing
S2.4.2. Ongoing
S2.4.3. Ongoing
S2.4.4. Ongoing
S2.5.1. Ongoing

S2.5.2. Not initiated.
S3.1. Ongoing; significant progress achieved; need to define objectives an priorities for future work
S3.2. Ongoing; some models completed but refinement needed
S3.3.1. Not completed; samples collected but data not summarized
S3.3.2. Not completed
S3.3.3. Ongoing
S3.3.4. Not initiated
S3.3.6. Ongoing
S4.1.-S4.2. Ongoing; need further review
S5.1.-S5.3. Ongoing; some subtasks not initiated
S5.4.1. Not completed; needs re-revaluation
S5.4.2. Not completed
S5.4.3. Ongoing
S5.4.4. Ongoing
S6.1. Completed
S6.2. Ongoing
S6.3. Not completed; needs revision
S6.4. Ongoing needs
S6.5. Ongoing
H1.1.-H1.4. Ongoing
H2.1-H2.3. Ongoing
H3. Ongoing; needs revision.
H4. Ongoing
H5. Not completed

Recovery Goal:

The team developed preliminary draft goals for reclassification and delisting for the panther. The population sizes in the goal are strictly preliminary and will be re-evaluated as the plan is revised. ***Action Item:*** ***The Service will provide the recovery goals for other large carnivores to the team for comparison.***

Reclassification to threatened would require a single population of at least 250 animals or a collection of subpopulations that collectively total at least 250 animals. Each subpopulation must have at least 50 animals. The subpopulations must have gene flow among them. Gene flow can be either natural or through management. A commitment to such management must be formally documented, funded and binding on the responsible agencies or organizations.

Delisting would require at least two populations (or two collections of subpopulations) that each total at least 250 animals. One population of 500 animals would not meet these conditions. As with reclassification, each subpopulation must have at least 50 animals and have gene flow among them. Gene flow can be either natural or through management. A commitment to such management must be

formally documented, funded and binding.

Based on these goals, recovery of the panther cannot be achieved without reintroduction and the reestablishment of at least one panther population somewhere in the historical range. The ultimate role of the existing south Florida panther population in panther recovery is not certain at this time. The best case is that enough habitat can be secured south of Orlando, Florida to meet the reclassification requirement of a population totaling at least 250 animals. However, there may not be enough habitat to obtain this population size and then, reclassification and delisting would be dependent on reintroduction and establishment of two additional populations. Regardless of whether sufficient habitat is available that would allow the south Florida panther population to be part of a recovery scenario (i.e, meet reclassification and delisting goals), because of the significant challenges to be overcome and time needed to achieve reintroduction, panther habitat and the numbers of panthers in south Florida must be maximized so that the likelihood of survival and eventual recovery of the panther remains as high as possible.

Panther Recovery Team Organization:

The team tentatively agreed that two subteams (a south Florida subteam and a reintroduction subteam) would be the most effective way to organize the recovery team. This topic will be revisited at the next meeting in October.

Issues Identified for Future Discussion:

The following topics were recording during the meeting that require further discussion by the recovery team and/or that need to be addressed in the recovery plan:

- Deer management on public and private lands
- Expansion of land acquisition tasks
- Identify range-wide public outreach efforts and needs
- Expand cooperative efforts for working with landowners
- Reintroduction tasks should be developed for the historic range not just Florida
- Applicability of using surrogates to assess feasibility of reintroduction areas
- Complete re-evaluation of captive breeding and its role in recovery
- Results of the north Florida reintroduction feasibility study and their applicability to future reintroduction
- Define specific goals and priorities for research and monitoring
- Integrate MERIT subteam efforts and conservation strategy into recovery plan

During the meeting the following comments were anonymously written on a flip chart as reminders to the Service:

1. Early public involvement is critical.

2. NEPA analysis may be beneficial.
3. Convene separate groups to address non-biological issues (social-economic, political,etc...)
4. Recovery will be borne on the backs of private landowners
5. Therefore, incentives, incentives, incentives.
6. More money.
7. Recovery = reintroduction
8. Faster dogs, more bullets, bigger traps.
9. Change the name.
10. More info concerning landowner incentives (e.g., safe harbor, credits, etc) and how they could be adapted to the FL panther.